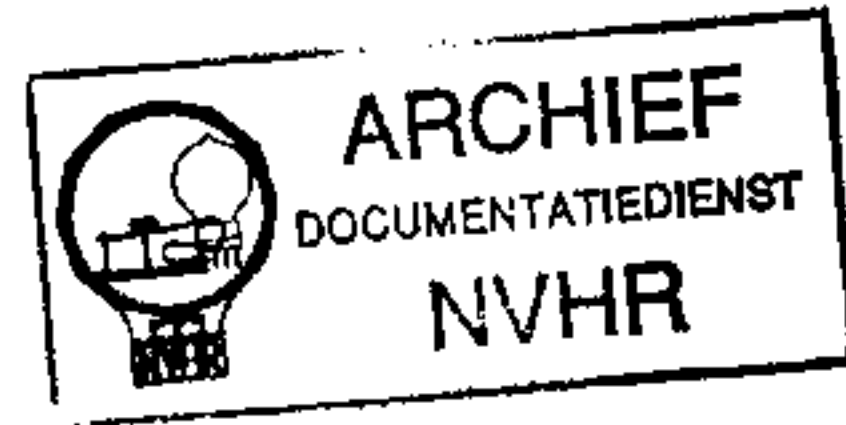




MONARCH

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STEREO AMPLIFIER

MODEL SA-40A

The MONARCH Model SA-40 is a deluxe integrated stereo amplifier. It is a simple to operate, compact and flexible unit with ample power 32 watts maximum for the speakers. It is provided with Tape, Phono, Tuner and Auxiliary Input, and a Tape Out for tape-recording of your favorite programs. Only selected high quality components have been used for stable and troublefree operation.

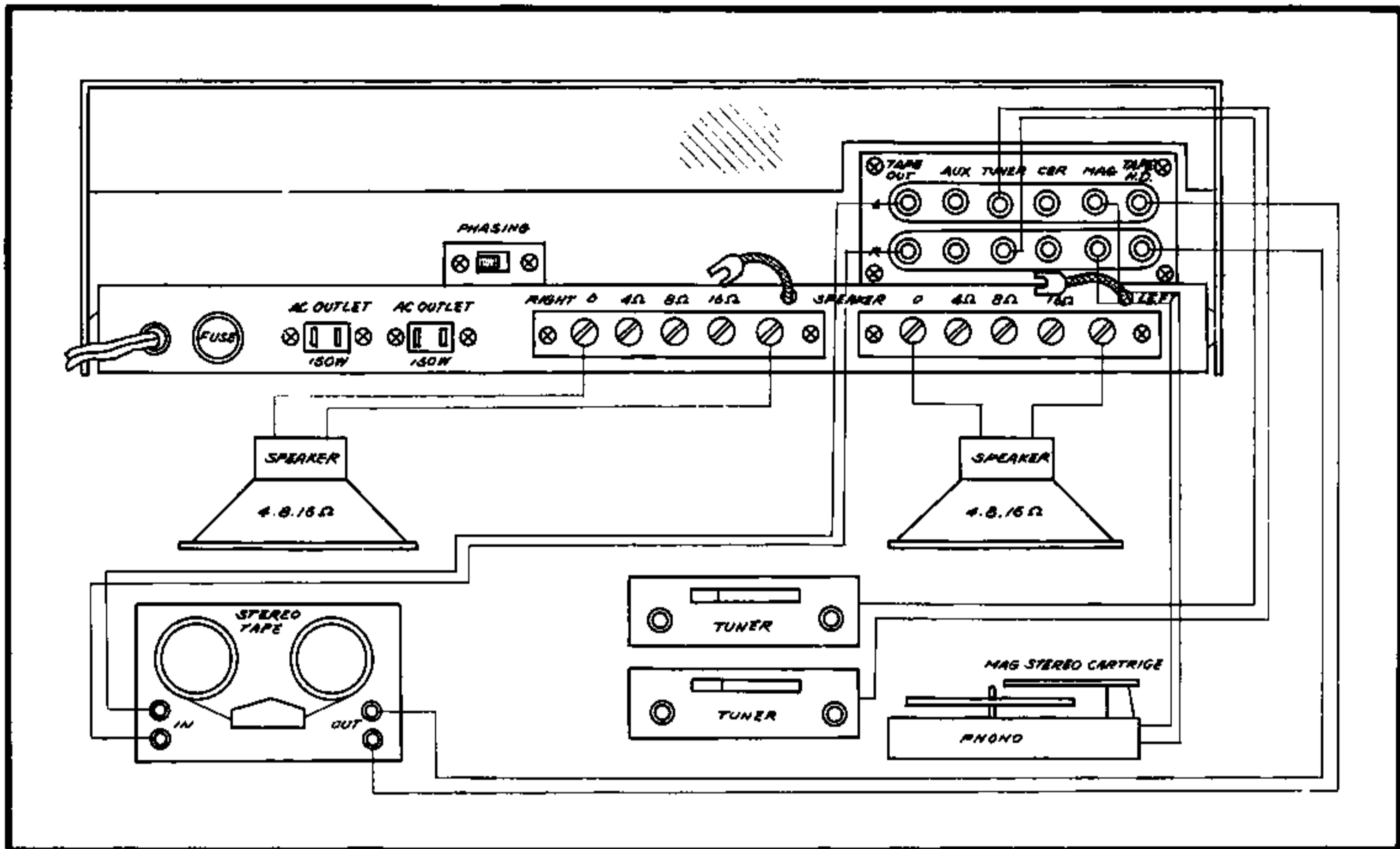
SPECIFICATIONS

Output, Program Material	32 W, 16 W per channel
Frequency Response	± 1 db 30 to 25,000 cps
Harmonic Distortion	less than 1 %
Sensitivity	Tape 3.5 mV
(at rated output)	Phono, Mag 4.5 mV
	Phono, Cer 0.16 V
	Tuner, Aux 0.3 V each
Hum and Noise	more than 60 db below rated output
Crosstalk, at 1,000 cps	more than -46 db
	Selector TAPE PHONO TUNER AUX
	Bass ±10 db 50 cps
	Treble ±10 db at 10,000 cps
	VOLUME
	BALANCE
	Function STEREO: NORM. INVERT
	MONAURAL, CHAN 1 CHAN 2
	RUMBLE FILTER
	LOUDNESS
	Power Switch
	Speaker phasing for Chan 2
	Hum Adjusters, each channel
Input Impedance	Tape 50,000 ohms
	Phono Mag 50,000 ohms
	Phono Cer 2 meg ohms
	Tuner Aux 100,000 ohms
	Speakers 4, 8 and 16 ohms
Output Impedance (each channel)	Tape Out High Impedance
AC Outlets	2 for 300 W total load
Tube Complement	2-12AX7 4-6BM8 1-6CA4
Power Supply	117 V, 50/60 cps; 110 W
Dimensions, Weight	12 1/4" x 10 3/8" x 4 3/8"; 16 lbs

MONARCH ELECTRONIC INTERNATIONAL, INC. NORTH HOLLYWOOD, CALIF

PRINTED IN JAPAN

MONARCH STEREO AMPLIFIER Model SA-40 CONNECTION DIAGRAM



INSTALLATION:

Carefully remove the amplifier from the packing carton. Make certain that the power switch at the lower right of the front panel is at the OFF position. The AC line plug should be inserted in the wall receptacle only when the amplifier connections have been completed.

Connections: Refer to the CONNECTION DIAGRAM. All of the amplifier connections are made on the rear panel. Shielded cables must be used for the input leads, and should be firmly soldered to the pin plugs. There are two rows of the pinjacks for channel 1 and 2 respectively.

TAPE: The outputs from the stereo tape heads direct are connected to the TAPE PLAY jacks. If stereo tape preamplifier outputs are to be used, use the AUX jacks.

PHONO: The magnetic stereo cartridge is connected to the MAG jacks. The ceramic cartridge is connected to the CER jacks.

TUNER: The outputs from the AM and the FM tuners are connected to the TUNER jacks. The output levels from the tuners should be at least 1 volt.

AUX: Program material from sources. Such as microphone, preamplifiers, etc., Where the levels are about 1 volt may be connected to the AUX jacks.

TAPE OUT: Any of the inputs, TAPE, PHONO, TUNER or AUX, may be fed into a tape recorder, stereo or monaural, by connecting the TAPE OUT to the recorder input. The internal tone controls do not affect the recording characteristics.

MONAURAL INPUTS: Monaural or single channel operation of any of the above sources is available by connecting its output to its respective input on either channel 1 or 2. For example, a monaural cartridge may be connected to one of the MAG jacks. The same applies to the use of the TAPE, TUNER and AUX jacks.

SPEAKER CONNECTIONS: The speakers should be placed from 8 to 15 feet apart against the wall. The use of matched speakers and enclosures is recommended. Each speaker is connected to the SPEAKER terminals at the left on the strip. Note the speaker impedances and connect the IMP SEL lead to one of the matthing terminals marked 4, 8 or 16 (ohms)

AC OUTLETS. There are 1 AC outlets to furnish a combined total of 300 watts. The left outlet should be used for the record player and the other for the tuners, etc

CAUTION! The amplifier power switch should never be turned on unless a speaker has been connected to each of the speaker terminals. This is to prevent possible damage to the output transformers.

OPERATION: Before the power is turned on, please observe the following instructions. Make certain that all of the desired input sources and the speaker connections have been made. Note the placement of the controls and their functions.

The input SELECTOR switch at the left will select one of the four inputs: TAPE, PHONO, TUNER and AUXilliary. There are two dual tone controls for each channel. The BASS is controlled by the outer knob and treble by the inner knob. At the "12 o'clock" position, the amplifier response will be flat, without cutting or boosting the highs or the lows.

The outputs of both channels are simultaneously adjusted by a single VOLUME control.

The function switch at the right has four positions.

In the STEREO NORMAL position, the channel 1 and 2 will be reproduced by the respective speakers. "INVERT" will interchange the output sources of the program.

In the MONAURAL 1 position the amplifier acts as a single channel unit, with the channel 1 input coming out from both speakers. MONAURAL 2 permits the channel 2 to operate in the same manner. Thus, for example, when there is only one source, as from an AM tuner, it may be connected to either one of the TUNER jacks and by setting the SELECTOR to TUNER and the function to the channel input used, the full amplifier output can be obtained.

The BALANCE control is used for stereo operation only. It controls the output levels of the individual channels independently of the VOLUME control and should be adjusted for the best listening effects.

The RUMBLE FILTER is used to cut out the low frequency variational effects sometimes produced by the record player and the tape recorder.

The LOUDNESS control is used to compensate for the apparent loss for low notes at low output levels.

SPEAKER PHASING (rear panel). This switch is used to adjust the speakers so that they will "aid" and not cancel each other. Set the VOLUME for a moderate output and stand at a position equidistant from the speakers.

Listen to some program and slide this switch until the sounds are clear without the hollow or empty effects from one of the speakers. Only one setting is necessary, and need not be adjusted unless the speaker connections have been altered.

the HUM ADjusters (rear panel) for each channel should be set for the minimum hum with the VOLUME and the BASS at their maximun settings.

PRECAUTIONS:

1. The amplifier is designed for AC operation at 105 to 125 volts. DO NOT USE ON DC POWER LINES.
2. Keep the input and the speaker cables well separated to avoid pickup of noise, hum, etc.
3. The amplifier should be kept in a well ventilated location.